High Mountain Dams in Upalco Unit,
Deer Lake Dam
Ashley National Forest
5.8. miles north of Swift Creek Campground
Mountain Home Vicinity
Duchesne County
Utah

HAER No. UT-42-D

HAER UTAH, 7-MOHON, 1-D-

PHOTOGRAPHS

WRITTEN HISTORIC AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
U.S. Department of the Interior
P.O. Box 25287
Denver, Colorado 80537

HISTORIC AMERICAN ENGINEERING RECORD

HAER UTAH 7-MOHON

High Mountain Dams in Upalco Unit, Deer Lake Dam

HAER No. UT-42-D

Location:

5.8 miles north of Swift Creek Campground, Ashley National Forest

Mountain Home vicinity, Duchesne County, Utah

UTM: 12.553860.4502350 Quad: Mount Emmons

Date of Construction:

c. 1925

Builder/Designer:

Farmers Irrigation Company

Present Owner:

Moon Lake Water Users Association, Roosevelt, Utah 84066

Original Use:

Dam

Present Use:

Dam

Significance:

Deer Lake is one of several natural high mountain lakes in the Swift Creek and Yellowstone River drainages dammed by the Farmers Irrigation Company in the 1920s and 1930s to store water for irrigation. The dam is a representative example of small-scale earth-fill construction in the Upalco

Unit of the Central Utah Project.

Inventoried by:

Clayton Fraser and James Jurale

Fraserdesign

Loveland, Colorado

October 19, 1985

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HISTORICAL INFORMATION

On June 25, 1925, the National Forest Service issued a special use permit to the Farmers Irrigation Company for "constructing and maintaining a dam and storing water for irrigation purposes" on Deer Lake in the Swift Creek drainage. A small-approximately 8 acres--but relatively deep lake, Deer Lake was limited in littoral area because of its narrow confines between two ridges. The lake receives flows from both White Miller and Farmers lakes--two other Farmers Irrigation Company reservoirs--and now acts as a regulating reservoir. The 140-foot-long, 18-foot-high dam is an earth-fill structure, with stone riprap on both the sloped upstream and downstream faces. It is drained by a 30-inch diameter gated steel pipe outlet, with a small timber weir for an overflow spillway. It is proposed that the dam be altered somewhat to return the lake to its natural level.

ARCHITECTURAL INFORMATION

Dam length:

140 feet

Dam height:

18 feet

Dam width:

7 feet

Construct:

Earth fill dam with stone riprap facing

Lake size:

11.0 acres; 249 acre-foot maximum capacity; 14 vertical foot maximum drawdown

Outlet:

Gated pipe; timber weir spillway

BIOGRAPHICAL INFORMATION

"Preliminary Engineering Report: Stabilization of High Mountain Lakes, Upalco Unit," National Forest Service Report, 1968, n.p.

William F. Gettleman, "Report on the Lakes and Reservoir of the Headwaters of the Uintah, Whiterocks and Lakefork Rivers, Uintah Project, Utah; February 1932," page 20.

Deer Lake Reservoir File #5154. Roosevelt District Ranger Office, Ashley National Forest, Roosevelt, Utah.

Field inspection by Clayton Fraser and Robert Righter, July 24, 1985.

For additional information, see Irrigation Canals in the Uinta Basin, HAER No. UT-30.

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